

ABSTRACT OF THE DISCLOSURE

A picture encoding system conversion device and a code rate conversion device for realizing the conversion taking into account both time delay and picture quality using the information on the code volume of the encoding parameters, input and output buffers and an input bitstream. There are provided a decoder 1 including an input buffer 21, a VLD unit 22, an inverse quantizer 23, an IDCT unit 24, an adder 35, a frame memory 26 and a motion compensation prediction unit 27; an encoder 2 including an adder 31, a DCT unit 32, a quantizer 33, an inverse quantizer 34, an IDCT unit 35, an adder 36, a frame memory unit 37, a motion compensation prediction unit 38, a VLD unit 39 and an output buffer 40; and a transcoder controller 3 including a decoder monitor unit 51, an input buffer monitor unit 52, a reception transmission channel monitor 53, a sending transmission channel monitor 63, an output buffer monitor unit 62 and a quantization step controller 74. The quantization step controller 74 modifies the quantization step of the encoder based on the information from the input buffer monitor, output buffer monitor, decoder monitor, reception transmission channel monitor and sending transmission channel monitor.